

**CLAIMS**

1. A billing method in a communication network including an information provider server device, a plurality of user terminals which receive information from said server device and a transfer device for routing information transmission between said server device and said user terminals; wherein said transfer device comprises:
  - a step of recording billing management information for identifying server devices which are to be subject to IP billing which is billing with respect to information providers;
- 10 a step of detecting a network address of said server device designated when said user terminal receives an information transmission from said server device;
  - a step of determining whether or not said server device is to be subject to IP billing based on the detected network address and said billing management information;and
- 15 a step of performing a billing procedure with respect to the information provider which performed the information transmission if said server device is determined to be subject to IP billing.

  

2. A billing method as recited in claim 1, wherein said transfer device does not route an information transmission if it is determined not to be subject to IP billing.
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3. A billing method as in claim 1, wherein said transfer device performs a billing procedure with respect to users who have received the information transmission if it is determined not to be subject to IP billing.

4. A billing method in a communication network including an information provider server device, a plurality of user terminals which receive information from said server device and a transfer device for routing information transmission between said server device and said user terminals; wherein said server device comprises:
  - a step of including billing information which indicates whether or not to use IP billing which is billing with respect to the information provider in the transmission data supplied to said user terminals in response to a request; and
  - said transfer device comprises:
    - a step of determining whether or not said information transmission is subject to IP billing based on said billing information when routing the exchange of said transmission data; and
    - a step of performing a billing procedure with respect to the information provider which provided said information transmission if it is determined to be subject to IP billing.
5. A billing method as in claim 4, wherein said transfer device performs a billing procedure with respect to users who have received the information transmission if it is determined not to be subject to IP billing.
6. A billing method in a communication network including an information provider server device, a plurality of user terminals which receive information from said server device and a transfer device for routing information transmission between said server device and said user terminals; wherein said transfer device comprises:

a mailbox for mediating push-type information transmission that is subject to IP billing which is billing with respect to the information provider;

and comprises:

a step of storing in said mailbox information mail sent from said server device

5 designating a desired destination and the address of said mailbox;

a step of transmitting the information mail stored in said mailbox to user terminals which are the designated destinations; and

a step of performing a billing procedure with respect to the information provider which offered said information transmission with respect to push-type

10 transmission services through said mailbox.

7. A billing method in a communication network including an information provider server device, a plurality of user terminals which receive information from said server device and a transfer device for routing information transmission between said server device and said user terminals; wherein said transfer device comprises:

an IP-billed mailbox for mediating push-type information transmission that is subject to IP billing which is billing with respect to the information provider; and

a user-billed mailbox for mediating information transmission that is not subject to IP billing;

20 and performs a billing procedure with respect to the information provider which offered said information transmission with respect to push-type information transmission services through said IP-billed mailbox; and

a step of performing a billing procedure with respect to the user that received said information transmission with respect to information transmission services through

said user-billed mailbox.

8. A billing method as in any one of claims 1-7, wherein the object of said billing is a communication fee with respect to communication services for the information 5 transmission.

9. A billing method as in any one of claims 1-7, wherein the object of said billing is an information fee with respect to information provided by the information transmission.

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10. A billing method as in claim 9, wherein said transfer device performs a billing procedure of information fees with respect to users if it is determined as not being subject to IP-billing, and otherwise does not perform a billing procedure of information fees.

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11. A billing method as in any one of claims 1-7, characterized in that said server device belongs to a first communication network following a first communication protocol and said plurality of user terminals belong to a second communication network following a second communication protocol different from that of said first 20 communication network; and

    said transfer device is a gateway for converting between said first and second communication protocols and routing information transmissions.

12. A billing method as in claim 11, wherein said second communication network

is a local network accommodating specific user terminals; and

    said first information communication network is a global network  
    interconnecting information resources such as said server device assigned identification  
    information for identifying an absolute network address.

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13.     A billing method as in claim 12, wherein said second communication network  
    is a mobile communication network accommodating a plurality of user terminals which  
    are mobile terminals, and

    said first information communication network is the Internet.